

Chimney Rock National Monument

Draft Management Plan

Pagosa and Columbine Ranger Districts, San Juan National Forest
Archuleta County, Colorado

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*Photo of Great House Pueblo at sunset, with Chimney Rock and Companion Rock in the background.
Photo by Mark D. Roper.

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LIST OF COMMONLY USED ACRONYMS

BA	Biological Assessment
BE	Biological Evaluation
BMP	Best Management Practice
BOCC	Board of County Commissioners
CDPHE	Colorado Department of Public Health and Safety
CFR	Code of Federal Regulations
CPW	Colorado Parks and Wildlife
CRIA	Chimney Rock Interpretive Association
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
FS	Forest Service
FSH	Forest Service Handbook
FSM	Forest Service Manual
LRMP	Land and Resource Management Plan
MOU	Memorandum of Understanding
MSO	Mexican Spotted Owl
NEPA	National Environmental Policy Act
NFMA	National Forest Management Act
NFS	National Forest System
NFSR	National Forest System Road
NFST	National Forest System Trail
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NRHP	National Register of Historic Places
NVUM	National Visitor Use Monitoring
PL	Public Law
ROD	Record of Decision
ROS	Recreation Opportunity Spectrum
ROW	Right-of-Way
SIO	Scenic Integrity Objective
SJNF	San Juan National Forest
USC	United States Code
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service

Chapter 1 – Introduction

1.1 Purpose of Plan

On September 21, 2012, Chimney Rock National Monument (the Monument) was established by Presidential Proclamation Number 8868. The proclamation requires that a management plan be prepared for the Monument.

The purpose of this management plan is to provide strategic direction and guidance for future management of the Monument. This management plan provides direction and guidance for the protection and interpretation of the scientific and historic objects of the Monument, as well as continued public access to those objects consistent with their protection. It provides a framework for informed decision making, while guiding resource management, practices, uses, and projects. The management plan does not include specific project and activity decisions. The project level decisions being made concurrently will follow all direction and guidance in both the current San Juan National Forest and Proposed Tres Rios Field Office Land and Resource Management Plan (LRMP) and the Chimney Rock Management Plan. Other project level decisions will be made at a later date, after additional detailed analysis and further public involvement. The management plan is adaptive in that it can be amended to update management direction based on new knowledge and information.

This management plan is strategic in nature and does not attempt to prescribe detailed management direction to cover every possible situation. While all components necessary for protection and interpretation of the scientific and historic objects of the Monument are included, the management plan also provides flexibility needed to respond to uncertain or unknown future events and conditions such as fires, floods, climate change, changing economies, and social changes that may be important to consider at the time future decisions are made.

This management plan has been prepared pursuant to the requirements of the Federal Land Policy and Management Act of 1976 (FLPMA), the National Forest Management Act of 1976 (NFMA), and the 1982 U.S. Forest Service (USFS) planning regulations (36 CFR 219) as allowed by the transition provision of the 2000 regulations (36 CFR 219.35, revised 2004; the 2012 forest planning regulations currently in effect allow use of the previous regulations for plan revisions initiated before the 2012 regulations took effect [36 CFR 219.17 (b) (3), 2012]). This management plan is also accompanied by an Environmental Impact Statement (EIS) as required by the regulations used in its development (43 CFR 1601.0–1601.6 and 36 CFR 219.10).

The scientific and historic objects identified in the proclamation (referred to as the “objects of the Monument) which are the focus of this management plan include:

- **Cultural Resources** – The Chimney Rock site contains nationally significant archaeological sites, with a total of 167 known prehistoric sites and structures within eight major site groups, or communities, including the highest Chacoan “great house” in the Southwest occurring at an elevation of 7,600 feet. The Chimney Rock site is also one of the best recognized archaeoastronomy resources in North America, with virtually all building clusters having views

of Chimney Rock and Companion Rock which frame multiple astronomical alignments and illustrate the Ancestral Pueblo People's knowledge of astronomy.

- **Cultural Values** – The Chimney Rock area holds deep spiritual significance for modern pueblo and tribal communities. Descendants of the Ancestral Puebloans return to this important place of cultural continuity for ceremonial and traditional purposes. The area also contributes to our knowledge about the Ancestral Pueblo People and their understanding and command of their environment, and affords opportunities to understand how geology, ecology, and archaeology interrelate. The features of the Monument also provide recreation opportunities to visitors from near and far.
- **Visual and Landscape Characteristics** – The two soaring rock pinnacles, Chimney Rock and Companion Rock, dominate the dramatic landscape of the Monument, rising hundreds of feet from the valley floor to an elevation of 7,900 feet. The ridgeline leading to the rock pinnacles and the Peterson Ridge area both offer spectacular views of the Monument and surrounding landscape.
- **Biological Features** – Biological features are also significant landscape characteristics and include wildlife species such as peregrine falcons that nest on Companion Rock, mule deer and elk that migrate through the area each fall and spring and live there during the critical winter months, as well as the many other wildlife species and habitats present in the Monument. The diversity of vegetation within the Monument, ranging from ponderosa pine and mixed conifer forests to desert grasslands and rare cactus species, are also important objects of the Monument.
- **Economic Opportunities** – The lands within the Monument are part of a larger area that helps support a growing travel and tourism sector that is a source of economic opportunity for surrounding communities, especially businesses in the region. This helps attract new residents, retirees, and businesses that will further diversify the local economy.

1.2 Planning Area

The planning area includes all National Forest System (NFS) lands within the boundaries of the Chimney Rock National Monument. The vicinity map in Figure 1 displays the location of the Monument relative to its location within the San Juan National Forest. Figure 2 is a map of the Monument.

1.3 Management Planning Overview

United States Forest Service (USFS) land and resource management planning is an adaptive process that includes plan development, monitoring, and adjustment based on desired social, economic, and ecological conditions and the evaluation of impacts to those conditions. The overall purpose of planning is to ensure responsible land management based on current information that guides land stewardship to best meet the needs of the American people.

Relationship of this Management Plan to Other Planning Documents

This management plan will amend the current LRMP. Specifically, the plan components listed in this management plan will supersede the plan components listed in Chapter 3, Section 3.17 of the LRMP on pages 213-214. The resource direction contained in Chapters 2 of the LRMP will continue to apply within the Monument unless specifically noted in the Chimney Rock Management Plan.

There are several federal, state, tribal, and local planning documents that influence management of lands in southwest Colorado. In the Chimney Rock area, this includes the 2005 Southern Ute Indian Tribe Comprehensive Master Plan and the 2012 Archuleta County Community Development Action Plan. A review of these plans did not identify any conflicts between the plans and the Chimney Rock Management Plan. An analysis of these plans is provided in Volume III, Appendix W of the 2013 LRMP.

Scope and Applicability of this Management Plan

The Chimney Rock Management Plan applies to all NFS lands and activities within the boundaries of the Chimney Rock National Monument. Before authorizing any specific project or land-use activity within the Monument, the Forest Service must complete a more detailed and site-specific environmental analysis, pursuant to the NEPA and its implementing regulations. When a specific project or activity is proposed on NFS land, additional public involvement occurs, site-specific effects are analyzed, and decisions are made regarding specific projects and other activities.

1.4 Management Plan Organization, Content, and Terminology

The management direction and guidance presented in Chapter 2 is organized by resource and resource use, and applies across the entire Chimney Rock National Monument landscape, except where specifically noted. This direction is divided into three interrelated components: 1) desired conditions, which, when taken as a whole, make up the vision for management of the Monument; 2) objectives, suitability, and allowable uses, which comprise the plan strategy that will be used to achieve the vision; and 3) standards and guidelines, which are the criteria and controls used to execute the strategy. This management direction and guidance (also referred to as plan components) should be followed in future implementation of projects and activities. The purpose of each of these plan components is described in greater detail below. The number of plan components under each resource or area varies due to the varying complexity of the resource, the extent of existing management direction already provided by law, policy, and the LRMP, the need for action, and priorities. Some resources or areas may not include all types of plan components.

Finally, a monitoring plan has been developed to evaluate progress toward achieving desired conditions and objectives, and to determine how well management requirements, such as standards and guidelines, are being applied. Programmatic direction for monitoring and evaluation is included to provide a framework for subsequent monitoring. The monitoring plan is presented in Chapter 3.

The management plan makes no decisions applicable to other ownerships or jurisdictions.

Management Plan Components

Desired Conditions

Desired conditions encompass the overarching goals of land and resource management. They are statements of the social, economic, and ecological attributes and values toward which management strives to achieve and characterize or exemplify the desired outcomes of land management. They describe how the area is expected to look and function in the future. Some desired conditions are general, while others are quite specific.

Desired conditions are aspirations; they may only be achievable over the long term. Collectively, specific projects implemented subsequent to this LRMP should contribute to maintaining and/or achieving desired conditions, but no single project should be expected to contribute to meeting all desired conditions.

Objectives

Objectives are concise projections of measurable, time-specific intended outcomes. Objectives are a means of progressing toward maintaining and/or achieving desired conditions. As with desired conditions, they are aspirations, not commitments or final project decisions. Implementation and achievement would rely upon sufficient funding and staffing levels.

Suitability and Allowable Uses

Suitability is defined by the capability of an area to accommodate specific uses and activities in a sustainable manner based on the area's inherent biophysical characteristics, public input, and the balancing of desired conditions for multiple resources. Suitability determinations are general determinations at the landscape level that can be refined as necessary at the project level. Suitability determinations in this management plan are made for the fire and fuels, vegetation management, timber, grazing, lands, minerals, and travel programs. The allowable use table at the end of Chapter 2 shows the suitability of these uses in the Monument and also identifies other activities that are allowed, restricted, or prohibited in the Monument.

Standards

A standard is an approach or condition that is determined to be necessary to meet desired conditions and objectives, and/or to ensure the long-term viability of resources. A standard (worded as “must” or “shall”) describes a course of action that must be followed or a level of attainment that must be reached. Deviations from standards would require analysis and documentation through a subsequent land management plan amendment.

Guidelines

A guideline (worded as “should”) is presumptively a requirement to meet desired conditions and objectives, and/or to ensure the long-term viability of resources. Guidelines are put forward in this management plan and the LRMP in recognition that there may be circumstances that could generate or require alternative, more appropriate means for meeting desired conditions and objectives, and/or to ensure the long-term viability of resources. It is also recognized that there may be limited individual circumstances where the need for a guideline no longer exists or the applicability of a guideline is otherwise altered (e.g., changes in surrounding land use that may render a guideline ineffective). In these situations a guideline has been determined to be more appropriate than a standard by allowing some flexibility in approach as conditions change and new information is obtained. The use of guidelines in this management plan and the LRMP is an acknowledgement that a single ideal approach for meeting our

desired conditions and objectives, and/or ensuring the long-term viability of resources, may yet be identified, and that there may be nuances in any given management situation that warrant a modified approach. If the Responsible Official for a project decision finds that deviation from a guideline is necessary, he or she must record the reasons for deviation as part of the project decision and explain how the intent of the guideline—as established by the desired conditions and objectives, and/or need to ensure long-term viability of resources—is being met through alternative means. If the intent of the guideline is met through alternative means, a land management plan amendment typically would not be required.

Additional Guidance

The development and implementation of projects on lands within the Monument is also guided by other sources, including applicable federal laws and regulations, executive orders, the establishing legislation, directives (manuals and handbooks), state and local laws and regulations, and best management practices (BMPs). The LRMP includes references to other applicable guidance where appropriate, but guidance from laws, regulations, policies, and agency directives is generally not detailed in this management plan unless necessary to emphasize or highlight information.

Administrative Actions

Administrative actions are the day-to-day activities required to serve the public and to provide optimum management of SJNF resources. These actions are allowable by regulation, do not require authorization within this management plan, and generally do not require site-specific analysis under NEPA. For example, in day-to-day management of the SJNF, the Forest Service is responsible for law enforcement activities that need not be authorized under the management plan or LRMP. Additionally, the SJNF may authorize or restrict access in certain areas in emergency situations (such as wildfire) or coordinate with other agencies and organizations, such as Colorado Parks and Wildlife (CPW), for specific activities that may not require site-specific NEPA documentation efforts. Other examples of administrative actions include, but are not limited to, mapping, surveying, inventory, monitoring, and research studies. These and other administrative actions will be conducted on lands within the SJNF, sometimes in partnership with other landowners, agencies, or entities. The degree to which these actions are carried out depends on agency policies, available personnel, funding levels, and further environmental analysis and decision-making, as appropriate.

Figure 1: Vicinity Map

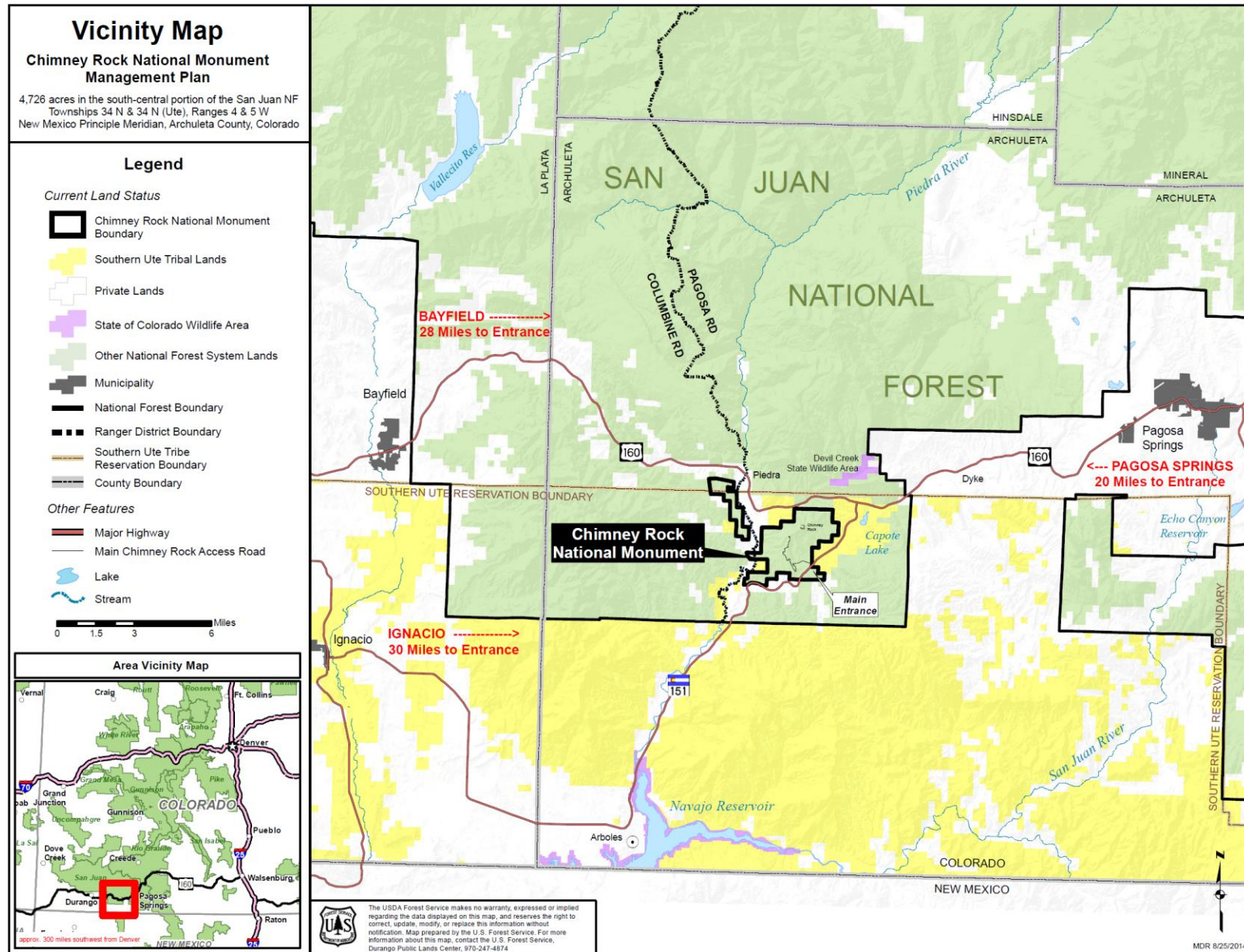
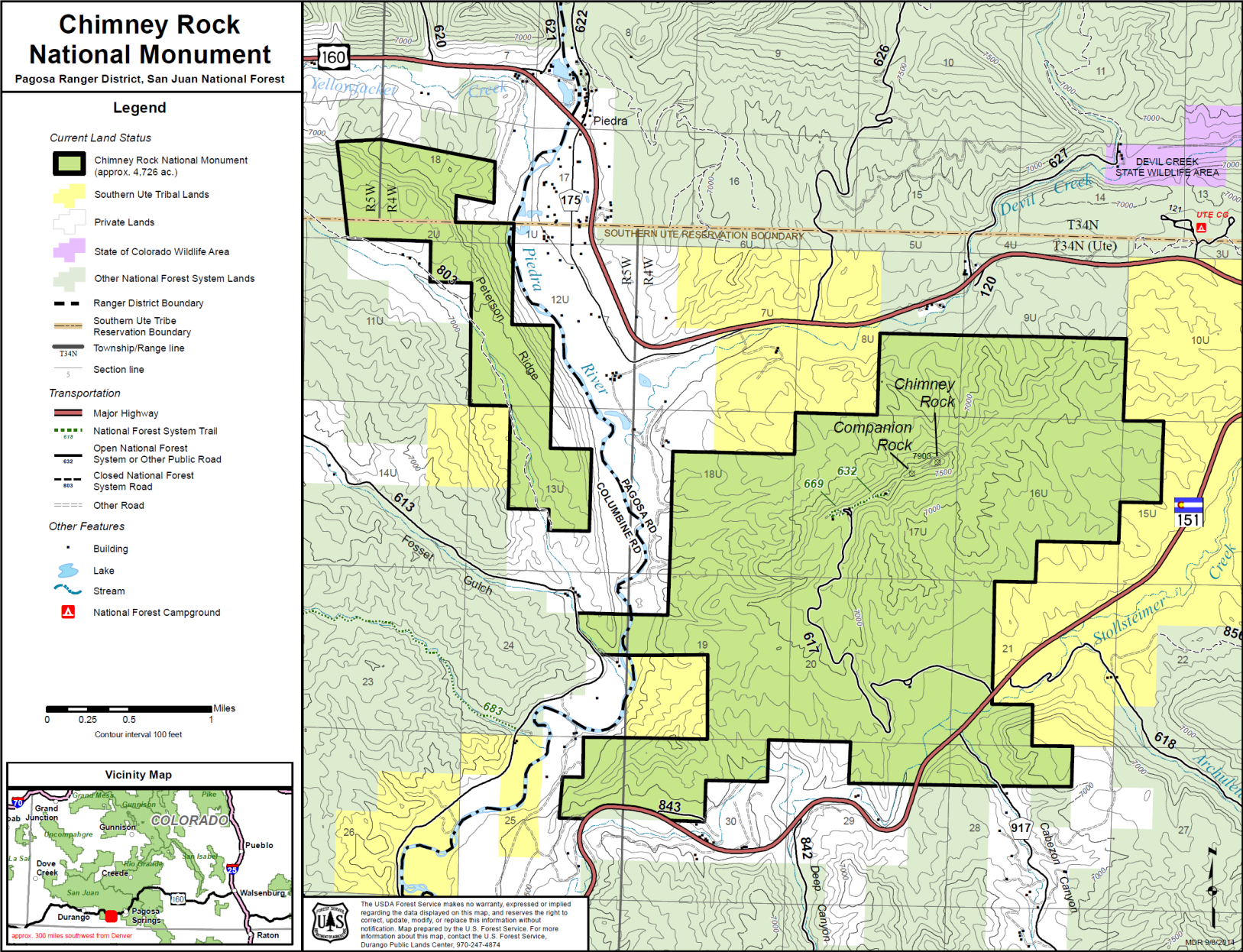


Figure 2: Chimney Rock National Monument



Chapter 2 – Resource Direction

2.1 Introduction

The Chimney Rock National Monument is a treasure in the public lands' system, containing spiritual, historic, and scientific resources of great value and significance. The site is recognized as an important archaeological resource dating to the Pueblo II era (roughly 900 -1150 A.D.). Within the Monument boundaries, 167 sites and structures have been identified, and many more are believed to exist. In addition to being the northeastern-most Chacoan outlier, the site is recognized as one of North America's foremost archaeoastronomy resources. Many native people hold Chimney Rock to be an important place of cultural continuity. In addition to the significant archaeological and archaeoastronomical characteristics, the site also includes significant visual and landscape characteristics, geological and biological features, as well as objects of deep cultural and educational value. It is a living landscape that shapes those who visit it and brings people together across time.

The site was listed on the National Register of Historic Places in 1970, and is one of thirty-nine Chaco Culture Archaeological Protection Sites designated under the Chacoan Outliers Protection Act of 1995. Because of the great value and significance of the spiritual, historic, and scientific resources of this site, Chimney Rock was declared a national monument by Presidential Proclamation on September 21, 2012.

The proclamation requires a management plan be written for the Monument and directs that the management plan ...

“...provide for protection and interpretation of the scientific and historic objects identified [in the proclamation], and continued public access to those objects, consistent with their protection. The plan will protect and preserve access by tribal members for traditional cultural, spiritual, and food- and medicine- gathering purposes, consistent with the purposes of the Monument, to the maximum extent permitted by law.”

The scientific and historic objects identified in the proclamation include cultural resources, cultural values, visual and landscape characteristics, biological features, and economic opportunities. These objects are further discussed in the proclamation (included in Appendix A).

The resource direction contained in Chapter 2 of the LRMP will continue to apply within the Monument unless specifically noted. Where the resource direction found in Chapter 2 of the LRMP has been amended for the Chimney Rock National Monument, these changes will be noted in each resource section below. In addition, plan components designed specifically to address the Chimney Rock National Monument will be adopted. These plan components are listed below and will supersede the plan components listed in Chapter 3, Section 3.17 of the LRMP.

(Please Note: The numbering of the desired conditions, objectives, standards, and guidelines is intended to match the numbering in Section 3.17 of the LRMP.)

2.2 Cultural Resources

The nationally significant archaeology, archaeoastronomy, and objects of deep cultural and educational value are among the primary reasons that the Chimney Rock area was designated as a National Monument. The site offers a valuable window into the cultural developments of the Pueblo II era and affords opportunities to understand how geology, ecology, and archaeology interrelate. Maintaining and developing partnerships will be critical for preserving, interpreting, and better understanding Chimney Rock National Monument. Partnerships with tribes, the National Trust for Historic Preservation, the Chaco Interagency Management Group, the University of Colorado, History Colorado, and other research and preservation organizations have been, and will continue to be, essential to this effort.

All desired conditions, objectives, standards, and guidelines related to cultural resources in Section 2.16 of the LRMP will continue to apply within the Monument. In addition, plan components designed specifically to address heritage and cultural resources within the Monument will be adopted. These additional plan components focus on the conservation and proper treatment of cultural and ethnographic¹ resources of the Monument, and conserving the viewsheds, night sky, and auditory environments that contribute to cultural values and archaeoastronomy resources of the Monument.

Desired Conditions

- 3.17.1 Cultural and ethnographic resources within the Monument are preserved and protected in a manner that ensures long-term stewardship of these resources and sustainable public benefits.
- 3.17.2 Cultural resources in the Monument are managed on a landscape level and the cultural values provided by the viewsheds, night sky, and auditory environment are maintained.
- 3.17.3 Archaeological and ethnographic research and tribal consultation provide for a better understanding, appreciation, interpretation, and management of the Monument.
- 3.17.4 Partnerships provide opportunities for research, interpretation, and sustainable tourism at the Monument.
- 3.17.5 Visitors respect and leave archaeological resources and tribal offerings undisturbed.

Objectives

- 3.17.6 Over the life of the plan, conduct inventories for and oversee research about archaeological, historical, and ethnographic resources to better understand and manage the resources.
- 3.17.7 Over the life of the plan, pursue partnerships and opportunities for grant funding for archaeological and ethnographic research and interpretation at the Monument.
- 3.17.8 Within 10 years, prioritize sites at the Monument for public interpretation, research, stabilization, conservation, and/or traditional uses.

¹ Ethnographic resources are objects and places, including sites, structures, landscapes, and natural resources, with traditional cultural meaning and value to associated peoples. Research and consultation with associated people identifies and explains the places and things they find culturally meaningful. Ethnographic resources may be eligible for the National Register of Historic Places as traditional cultural properties.

- 3.17.9 Within five years, implement a monitoring plan for cultural resources that evaluates factors such as cultural resource use-allocation, National Register of Historic Places (NRHP) status, public use patterns, vandalism occurrences, vulnerability and cultural sensitivity.
- 3.17.10 Within five years, design and implement archaeological site hardening along the trail to the Great House and other areas as needed.

Standards

- 3.17.11 Activities that occur within the Monument must be conducted in a manner that limits visual, auditory, and night sky impacts to help preserve the cultural and traditional values associated with the Monument.
- 3.17.12 All new ground-disturbing activity within 300 feet of an eligible or unevaluated site must be reviewed and/or monitored by a qualified archaeologist.
- 3.17.13 If unidentified cultural resources are discovered during project activities within the Monument, activities must be halted and a Forest Service archaeologist notified before project activities may proceed. This includes, but is not limited to, the discovery of human remains, funerary objects, sacred objects, objects of cultural patrimony, and/or archaeological artifacts or deposits.
- 3.17.14 Employees, permittees, volunteers, contractors, and subcontractors must be informed of their responsibilities regarding 1) protective measures for cultural resources; 2) the maintenance of confidentiality of archaeological site location information; and 3) the requirement that any disturbance to, defacement of, or collection or removal of archaeological, historic, or sacred material is not legal without proper authorization and permit.

Guidelines

- 3.17.15 Archaeological excavations should be designed to avoid or minimize potential impacts to human remains. If human remains are encountered, they will be treated in accordance with the San Juan National Forest Discovery Plan.
- 3.17.16 Excavations at archaeological sites should be backfilled, including excavations at prehistoric architectural sites. The Great House (5AA083), Parking Lot Site (5AA086), Ravine Site/Great Kiva (5AA088) sites should be the only prehistoric architectural sites that are left open/stabilized and maintained for intensive visitation. No additional prehistoric architectural sites should be left open to the elements, developed, stabilized and/or maintained for intensive visitation.
- 3.17.17 Proposed projects should be designed or modified so that significant cultural resources are avoided, and so that the determination of effect for the undertaking is either “no historic properties affected,” or “no adverse effect”.
- 3.17.18 Ground disturbing activities within 300 feet from the boundaries of identified eligible or unevaluated cultural sites should be avoided unless the purpose is to protect the cultural site. Give consideration when setting the buffer to the importance of setting, context, and natural topographic barriers in managing and preserving heritage and traditional values of particular sites and settlement clusters.
- 3.17.19 Wherever possible, facilities within the Monument should be located in previously disturbed or existing developed areas to help limit impacts to cultural and ethnographic resources.

- 3.17.20 New facilities should be located in areas that blend with cultural landscapes and should be designed and located in a manner that does not negatively impact ethnographic resources.
- 3.17.21 Archaeological sites should be closed to public access if damage occurs that cannot be mitigated.
- 3.17.22 Sites that are experiencing vandalism or damage from other sources (such as erosion) should be considered high priority for mitigation, which could include research. Research on such sites should be designed to recover remaining information potential, especially when physical in-place preservation or conservation may not be feasible over the long term.

2.3 Tribal Interests

The Chimney Rock area holds deep spiritual significance for modern pueblo and tribal communities. Today, descendants of the Ancestral Puebloans return to this important place of cultural continuity for ceremonial and traditional purposes. The area is also an important source of traditional cultural materials that are collected by tribal members for food and medicine. The proclamation requires the management plan to protect and preserve access by tribal members for traditional cultural, spiritual, and food and medicine gathering purposes, consistent with the purposes of the Monument, to the maximum extent permitted by law. Nothing in the proclamation, the LRMP, or the Chimney Rock Management Plan shall be deemed to enlarge or diminish the rights of any Indian tribe.

In addition to the desired conditions, objectives, standards, and guidelines for other resources listed in this management plan, plan components designed specifically to address tribal interests within the Monument will also be adopted. These additional plan components focus on consulting with tribes, protecting resources important to tribes, and providing access to these resources.

In addition to the LRMP and the plan components listed below, the SJNF will continue to ensure that the hunting rights of the Southern Ute Indian Tribe within the exterior boundaries of the Southern Ute Indian Reservation, including lands within the Monument, are upheld. The SJNF will also continue to ensure that the hunting and fishing rights of the 1873 Brunot Agreement are upheld on public lands under their management jurisdiction, including those lands within the Monument.

Desired Conditions

- 3.17.23 Tribal access to the Monument for ceremonial, traditional cultural, and food and medicine gathering purposes is protected and encouraged.
- 3.17.24 Tribal traditions are valued by the Forest Service and the public. When appropriate, these traditions are incorporated into the interpretation of the Monument to help provide visitor experiences that foster cultural understanding. Tribes are encouraged to participate in the development of interpretive materials and to assist in the training of tour guides/interpreters.
- 3.17.25 Tribal consultation regarding management, interpretation, traditional uses and other issues of tribal concern within the Monument is an on-going process and is fostered to maintain open communication with tribes.

Objectives

- 3.17.26 Within five years, produce a tribal oral history of the Chimney Rock area.
- 3.17.27 Within five years, develop a policy in consultation with the tribes that specifies how traditional food and medicine gathering will occur within the Monument.
- 3.17.28 Conduct annual tribal consultation meetings regarding the Monument and provide additional opportunities to consult throughout the year.

Standards

- 3.17.29 Projects must be designed or modified so that negative impacts to areas with high value for traditional/ceremonial uses, and food and medicine gathering uses are avoided or mitigated.
- 3.17.30 When possible, inadvertent discoveries of human remains will be reburied in situ, with only the minimum amount of disturbance/non-destructive analysis necessary to determine whether it is a forensic case and to determine cultural affiliation. If reburial in place is not possible, reburial in a secure location must occur as close to the original burial location as possible. Potential reburial locations will be identified through tribal consultation.

Guidelines

- 3.17.31 Tribal requests to gather forest products within the Monument for traditional, non-commercial use should be considered as priority use as long as the collecting of such materials does not result in damage to the objects of the Monument or resource degradation.

2.4 Recreation

As stated in the proclamation, the Monument is part of a larger area that supports a growing travel and tourism sector that is a source of economic opportunity for the communities and businesses in the region. Visitors are drawn to the area's archaeological sites, outstanding and diverse scenery, and the interpretive and educational opportunities offered at the Monument. Recreational visitation to the Chimney Rock area has increased over time, as have amenities designed to accommodate the increased visitation and improve visitor experiences.

The Chimney Rock area of the Monument has a Summer Recreation Opportunity Spectrum (ROS) of Roaded Natural; the Peterson Mesa area is classified as Semi-Primitive Non-Motorized. The Winter ROS for the entire Monument is semi-primitive, non-motorized. The Monument will continue to be managed to maintain the current ROS. All desired conditions, objectives, standards, and guidelines in the Recreation Section at 2.14 and the Interpretation and Conservation Education Section at 2.22 in the LRMP will continue to apply within the Monument. In addition, plan components designed specifically to address the recreation environment, interpretation, and conservation education within the Monument will be adopted. These additional plan components focus on providing increased visitor and interpretive services while still providing for the protection of the other objects of the Monument.

In addition to these plan components, the proclamation limits all motorized and mechanized vehicle use to designated roads, except for emergency or authorized administrative purposes.

Desired Conditions

- 3.17.32 Management of the Monument supports recreation and tourism activities without degradation to the objects of the Monument, thereby contributing to the local and regional economy.
- 3.17.33 Access to the Monument for recreational activities is managed and enabled in a manner that protects and provides for the enjoyment of the objects for which the Monument was created.
- 3.17.34 Public education and appreciation of the objects of the Monument are enhanced through the continuation and expansion of interpretive activities and environmental education opportunities. Through these interpretive and educational activities, visitors and other users learn about and gain respect and value for the objects of the Monument and the ongoing needs for protection and stewardship.
- 3.17.35 Interpretation and conservation education within the Monument are accomplished with a wide range of partners.
- 3.17.36 Management of visitor capacity and implementation of public safety measures considers visitor experiences and resource protection needs within the Monument.

Objectives

- 3.17.37 Within ten years, provide alternative opportunities to experience the objects of the Monument through the construction of additional non-motorized trails.
- 3.17.38 Within five years, design and implement public safety measures in the Monument, including along the trail to the Great House.
- 3.17.39 Within five years, develop a facilities management plan for the Monument.
- 3.17.40 Within three years, develop an interpretive plan and improve signage for the Monument.
- 3.17.41 Within one year of plan approval, issue closure orders prohibiting the following:
 - Prohibit rock climbing on Chimney Rock and Companion Rock by prohibiting public entry into the 3 acre area surrounding Chimney Rock and Companion Rock (shown in Figure 6 in the EIS).
 - Prohibit over-snow vehicle use within the Monument.
 - Prohibit horses and dogs on the Great Kiva Trail (Trail #669) and the Great House Trail (Trail #632).
- 3.17.42 Conduct annual interpretive activities and environmental education programs to help inform the public about the archaeology, tribal traditions, unique landscape, diverse geology, natural processes, and flora and fauna of the Monument.

Standards

- 3.17.43 Motorized and mechanized vehicle use must be restricted to designated open roads except for emergencies or authorized administrative purposes.
- 3.17.44 Recreation special use permits shall only be issued when the proposed activity directly relates to and provides support for the protection and interpretation of the objects of the Monument.

Guidelines

- 3.17.45 Persons at one time (PAOT's) should be limited if visitation results in negative impacts to the objects of the Monument, safety concerns, or recurrent perceptions of crowding that cannot otherwise be mitigated.

2.5 Scenery and the Auditory Environment

The scenic vistas, night sky, and auditory environments are important objects of the Chimney Rock National Monument that draw tribal members and visitors to the site. The Monument possesses outstanding and diverse scenery as well as unique and significant archaeoastronomical alignments that are dependent on undisturbed views of the horizon and night sky from numerous points within the Monument. These sites and the associated landscape, viewshed, and night sky have significant traditional values for many pueblos and tribes. As a culturally significant and publicly interpreted site, the auditory environment of the Monument is also an important part of both the tribal member's and visitor's experience.

The Monument currently has a scenic integrity objective (SIO) of high in the main Chimney Rock area, and an SIO of low in the Peterson Mesa area. With implementation of this management plan, the entire Monument will be managed for an SIO of high. All desired conditions, objectives, standards, and guidelines related to scenery in Section 2.15 of the LRMP will continue to apply within the Monument. In addition, plan components designed specifically to address scenery and the auditory environment within the Monument will be adopted. Plan components addressing the scenic and auditory environment are found in both the Cultural section and the Scenery and Auditory Environment Section of this Chapter, and focus on conserving the viewsheds, night sky, and auditory environments that occur within the Monument, as well as appropriately integrating facility and site development with the natural environment.

Impacts to scenic, night sky, and auditory resources will be considered during planning for all projects and activities within the Monument. The Scenery Management System inventory and the Built Environment Image Guide for the USFS will be validated and updated as a part of ongoing site-specific project and programmatic analysis.

Desired Conditions

- 3.17.46 All activities occurring in the Monument are managed in a manner that protects, enhances, or conserves the Monument's scenic and auditory resources.
- 3.17.47 Development of facilities and improvements within the Monument is done in a manner that is consistent with the character of the site, and does not detract from viewsheds, or the night sky and auditory environment.

Objectives

- 3.17.48 Over the life of the plan, document existing air quality conditions, including visibility. This could include photo documentation from key viewpoints or air quality data obtained from existing monitoring facilities in the region.

- 3.17.49 Within five years, develop design guidelines for the Chimney Rock National Monument based on the Built Environment Image Guide.

Standards

- 3.17.50 The Monument must be managed for a scenic integrity objective (SIO) of high. *(Similar to LRMP standard 2.15.13, but changes the SIO on Peterson Ridge from low to high)*
- 3.17.51 New facilities and associated development must be located in areas where they will not detract from views of Chimney Rock, Companion Rock, or other significant cultural features or viewsheds within the Monument, and they must be designed to be consistent with the character of the site.
- 3.17.52 In order to preserve views of the night sky, the use of permanent lighting within the Monument must be minimized to only that needed for safe site operations. Light fixtures must be designed in a way to prevent horizontal and upward light pollution. *(Similar to LRMP guideline 2.15.24, but has been modified to become a standard)*

Guidelines

- 3.17.53 Activities that occur within the Monument should be conducted in a manner that limits auditory impacts in order to preserve the cultural values associated with the Monument.

2.6 Minerals and Geology

The geology of the Monument provides the foundation of the dramatic landscape setting and scenic vistas that are important objects of the Monument. The dominant geologic feature of the Monument is the pair of towering sandstone spires known as Chimney Rock and Companion Rock. The prominent ridgelines within the Monument served as the location for many of the structures built by the Ancestral Puebloans and command excellent vantage points from which to observe the surrounding landscape and the astronomical phenomena framed by Chimney Rock and Companion Rock. The Monument also contains mineral resources typical of the area such as oil, natural gas, coal, and saleable minerals.

Within the 4,726 acre Monument, 3,895 acres are under federal mineral ownership. The remaining 831 acres of the mineral estate are privately owned. All 3,895 acres under federal mineral ownership have been withdrawn from mineral entry by the proclamation in order to protect the objects of the Monument. However, 551 acres are part of a valid existing oil and gas lease that was issued prior to establishment of the Monument. The establishment of the Monument was subject to valid existing rights; the proclamation directs that development under existing oil and gas leases within the Monument be managed so as not to create any new impacts that would interfere with the proper care and management of the objects protected by the proclamation. The possibility also exists that the privately-owned mineral resources within the Monument may be developed at some point in the future, although to date there has been no stated interest in such development.

All desired conditions, objectives, standards, and guidelines related to minerals in Section 2.19 of the LRMP will continue to apply within the Monument. In addition, plan components designed specifically to address minerals and geology within the Monument will be adopted. These additional plan components focus on protecting the objects of the Monument when managing valid existing rights and

surface impacts from development of private minerals within the Monument, and the potential future acquisition of private mineral rights.

Desired Conditions

- 3.17.54 Management of mineral development subject to valid existing rights does not interfere with the proper care and management of the objects of the Monument.
- 3.17.55 Geologic processes continue to shape the landscape of the Monument.
- 3.17.56 All minerals within the Monument are federally owned or subject to non-surface disturbing agreements.

Objectives

- 3.17.57 Within five years, develop a strategy to move valid existing federal and private mineral rights within the Monument into non-surface disturbing status. This includes pursuing opportunities to acquire private mineral rights from willing sellers.

Standards

- 3.17.58 Development of valid existing federal mineral rights within the Monument shall be managed so as not to create any new impacts that would interfere with the proper care and management of the objects protected by the proclamation.
- 3.17.59 If non-federal minerals within the Monument are acquired by the federal government, these areas must be withdrawn from all forms of mineral entry.

Guidelines

- 3.17.60 Geologic processes should be allowed to continue shaping the landscape of the Monument unless such processes would interfere with proper care and management of Monument objects, or would interfere with human health and safety.
- 3.17.61 Surface use within the Monument to develop private mineral rights should be mitigated to the extent practicable to minimize interference with proper care and management of Monument objects.
- 3.17.62 When offered by a willing entity, the federal government should acquire non-federal minerals within the Monument.

2.7 Terrestrial and Riparian Ecosystems

The diversity of vegetation within the Monument, ranging from ponderosa pine and mixed conifer forests to desert grasslands and rare cactus species, are important objects of the Monument. The terrestrial and riparian ecosystems of the Monument contribute to scenic vistas, provide tribal members with traditional cultural materials, and provides important wildlife habitat for a diversity of species. Management of these ecosystems is a critical part of the sustainable ecosystems strategy, as described in Section 2.1 of the LRMP.

All desired conditions, objectives, standards, and guidelines related to terrestrial ecosystems in Section 2.2 and riparian area and wetland ecosystems in Section 2.4 of the LRMP will continue to apply within

the Monument. In addition, plan components designed specifically to address terrestrial and riparian ecosystems within the Monument will be adopted. These additional plan components focus on managing vegetation in a way that helps protect the cultural, historic, educational, and aesthetic values of the Monument. Emphasis is also placed on protecting traditional cultural materials within the Monument, and prioritizing restoration, fuels reduction, and habitat improvement projects.

Impacts to traditional cultural materials and special status plant species (federally listed and Forest Service sensitive species) will be considered during planning for all projects and activities within the Monument. In addition to the plan components listed below, the proclamation limits timber harvest and prescribed fire within the Monument to only those projects needed to address the risk of wildfire, insect infestations, or disease that would endanger the Monument or imperil public safety.

Desired Conditions

- 3.17.63 Vegetative communities within the Monument from which traditional cultural materials are gathered are resilient and self-perpetuating.
- 3.17.64 Ground cover within the Monument is maintained at levels necessary to prevent accelerated rates of erosion, and provide protection to archaeological sites and soils.
- 3.17.65 Vegetative features within the Monument that provide historic, cultural, educational, or aesthetic value are protected. Examples include protecting culturally scarred trees, fire scarred trees, or trees along trails or near cultural resources that provide shade and/or aesthetic value. It also includes protecting populations of plants that provide traditional cultural materials.

Objectives

- 3.17.66 Within ten years, prioritize where restoration, fuels treatment, or habitat improvement projects may be needed within the Monument, and where important traditional cultural materials collected by tribes are located.
- 3.17.67 Within five years, conduct an assessment of riparian health and stream channel stability along the portions of Stollsteimer Creek and the Piedra River within the Monument.
- 3.17.68 Within five years, complete one streambank restoration project on Stollsteimer Creek.
- 3.17.69 Within five years, restore one grassland site within the Monument disturbed by unauthorized uses.

Standards

- 3.17.70 Vegetation treatments must not result in fuel accumulations near cultural sites eligible or potentially eligible for the National Register of Historic Places (NRHP) except for limited-area, short-duration situations that will be mitigated soon after or as part of treatments.

Guidelines

- 3.17.71 Spraying of insecticides to inhibit or reduce the potential for tree mortality by insects should be undertaken only after consultation with, and support by, Region 2 Forest Health Protection Specialists.

2.8 Terrestrial Wildlife and Fisheries

The diversity of vegetation, geological formations, and the general location of the Monument provides habitat for many terrestrial and aquatic species including species of conservation concern, and species that are economically and socially important on the San Juan National Forest. Numerous species utilize habitat in the Monument year-round such as mule deer, Merriam's turkey, and golden eagle. Other species occupy the area seasonally such as migratory birds and bats that winter in southern latitudes and are present spring through summer. Some species such as peregrine falcon and white-throated swifts occupy the area because of the geological formations (rock spires) that provide important habitat for breeding. And finally, some species such as elk migrate to the area from higher elevations outside the Monument, or migrate from northern latitudes such as bald eagle, and reside in the Monument most of the winter. Large numbers of elk, bald eagles, and golden eagles present during winter attract the interest of local publics and visitors from outside the community. Management of terrestrial and aquatic species is a critical part of the sustainable ecosystems strategy, as described in Section 2.1 of the LRMP.

All desired conditions, objectives, standards, and guidelines related to terrestrial wildlife in Section 2.3 of the LRMP will continue to apply within the Monument, except where specifically noted below. In addition, plan components designed specifically to address terrestrial wildlife within the Monument will be adopted. These additional plan components focus on protecting wildlife habitat within the Monument, with specific emphasis on mule deer and elk migration corridors, winter concentration areas, and severe winter range, as well as breeding habitat for peregrine falcon. Impacts to special status terrestrial wildlife species will be considered during planning for all projects and activities within the Monument.

Nothing in the proclamation, the LRMP, or the Chimney Rock Management Plan shall be deemed to enlarge or diminish the jurisdiction of the State of Colorado with respect to fish and wildlife management, or shall be deemed to enlarge or diminish the rights of any Indian tribe. The SJNF will continue to ensure that the hunting rights of the Southern Ute Indian Tribe within the exterior boundaries of the Southern Ute Indian Reservation, including lands within the Monument, are upheld. In addition, the SJNF will continue to ensure that the hunting and fishing rights of the 1873 Brunot Agreement are upheld on public lands under their management jurisdiction, including those lands within the Monument. In exercising their Brunot hunting rights, the Ute Mountain Ute and Southern Ute tribal members are required to adhere to federal policy and regulations designed to protect natural and cultural resources, including direction in the Chimney Rock Management Plan designed to protect the objects of the Monument.

Desired Conditions

- 3.17.72 Wildlife habitat across the Monument continues to support the terrestrial wildlife species considered objects of the Monument.
- 3.17.73 Peregrine falcons continue to occupy breeding habitat on Companion Rock or Chimney Rock.
- 3.17.74 Migrating mule deer and elk continue utilizing winter concentration areas and severe winter range habitat across the Monument.

Objectives

- 3.17.75 Over the life of the plan, conduct management actions designed to maintain or improve desired vegetative composition and structural conditions to provide for short and long-term habitat needs of species. Emphasis areas include habitat for special status species, and elk and mule deer winter concentration habitat and migration corridors.
- 3.17.76 Over the life of the plan, conduct monitoring of deer and elk use in winter concentration areas within the Monument to ensure that habitat capability and effectiveness are maintained during key use periods.
- 3.17.77 Over the life of the plan, conduct monitoring of peregrine falcon nesting on Companion Rock to ensure that habitat capability and effectiveness are maintained during key use periods.
- 3.17.78 Within one year of plan approval, issue a closure order prohibiting public entry into the 400 acre area surrounding Chimney Rock and Companion Rock from March 15 to July 31 to help protect breeding habitat for peregrine falcons, with the exception of use along the Great House Trail (NFST 632) (shown in Figure 6 in the EIS).
- 3.17.79 Coordinate with the Southern Ute Indian Tribe, Colorado Parks and Wildlife, and other resource specialists regarding management of big game within the Monument and on adjacent lands.

Standards

Big game winter range and migration corridors:

- 3.17.80 Projects or activities must be designed and conducted in a manner that does not reduce habitat effectiveness, and preserves big game migration corridors within the Monument. *(Similar to LRMP guideline 2.3.62 but has been modified to become a standard)*

Peregrine falcon:

- 3.17.81 Human disturbance must be restricted if adverse impacts to peregrine falcons are detected.
- 3.17.82 New structures must not be developed in peregrine falcon nesting habitat surrounding Companion Rock and Chimney Rock where structures did not historically occur.

Wildlife-human conflict abatement:

- 3.17.83 Construction, reconstruction, and placement of recreational facilities such as garbage receptacles and domestic animal kennels must incorporate design features to minimize wildlife entrapment and access to human-made attractants.

Guidelines

- 3.17.84 Human disturbance should be limited in the 400 acres surrounding Companion Rock and Chimney Rock from March 15 through July 31 to minimize disturbance to peregrine falcons during the breeding season (refer to Figure 6 in the EIS). This does not apply to historic levels and patterns of disturbance under which the nest was established and occupied, but is intended to apply to additional levels or changes in disturbance patterns. *(Similar to LRMP guideline 2.3.49 and direction found in LRMP Table 2.3.2 for peregrine falcons, but has been modified based on site specific conditions within the Monument)*
- 3.17.85 Habitat effectiveness for raptor species should be maintained when conducting management activities within the Monument.

2.9 Lands

Numerous land uses occur within the Chimney Rock National Monument including state highways, county roads, private roads, telephone lines, power lines, gas pipelines, oil and gas monitoring wells, ditches, water pipelines, and ponds. In the past, research projects, commercial filming, and commercial still photography have also occurred. Most of these land uses have been authorized by special use permits, ROW grants, easements, and/or leases. However, some unauthorized activities, including trespass livestock grazing and fences are occurring within the Monument.

All desired conditions, objectives, standards, and guidelines related to lands and special uses in Section 2.18 of the LRMP will continue to apply within the Monument, but with some minor edits. Any edits to existing plan components are noted below. In addition, plan components designed specifically to address lands and special uses within the Monument will be adopted. These additional plan components focus on proper boundary posting, addressing unauthorized uses in an appropriate manner, and protecting the objects of the Monument while still providing appropriate land uses.

In addition to the existing LRMP and the additional plan components listed below, the proclamation also provides direction for management of lands and special uses within the Monument. Specifically, the proclamation prohibits the sale or disposition of any federal lands and interests in lands within the boundaries of the Monument.

Desired Conditions

- 3.17.86 Boundaries of the Monument are clearly marked on the ground.
- 3.17.87 Non-recreation special use authorizations are issued only if the objects of the Monument can be protected.

Objectives

- 3.17.88 Within fifteen years, all unauthorized improvements within the Monument are either eliminated or authorized as appropriate.
- 3.17.89 Within ten years, the entire boundary of the Monument will be marked and posted.

Standards

- 3.17.90 Federal lands or interest in lands within the Monument must not be conveyed out of federal ownership. (*Similar to LRMP guideline 2.18.17, but modified to become a standard*)
- 3.17.91 New non-recreation special use authorizations for new facilities shall be prohibited unless they are within existing utility corridors or along existing roads in order to protect the objects of the Monument. (*Replaces guidance related to Chimney Rock National Monument found in LRMP guideline 2.18.29*)

Guidelines

- 3.17.92 When offered by a willing entity, the SJNF should acquire lands or interests in lands adjacent to the Monument that have important cultural resources, and/or when acquisition of adjacent properties would enhance protection of the objects of the Monument.

2.10 Fuels and Fire Management

Management of fires within the Monument is dictated first and foremost by firefighter and public safety, but also includes strong consideration of impacts to the historic, cultural, and traditional resources within the Monument, as well as critical infrastructure. In recent years, approximately 750 acres of fuels reduction projects have occurred, including thinning, mastication, prescribed burning, and pile burning designed to help improve forest health, address public safety concerns, and reduce the risk of wildfires to the sensitive cultural resources within the Monument. The proclamation allows for a continuation of these activities when they are needed to address the risk of wildfire, insect infestations, or disease that would endanger the Monument or imperil public safety. Impacts to the objects of the Monument will continue to be considered when determining the appropriate management response to wildland fire and when planning for fuels management projects.

All desired conditions, objectives, standards, and guidelines related to fire and fuels management in Section 2.11 of the LRMP will continue to apply within the Monument. In addition, plan components designed specifically to address fire and fuels management within the Monument will be adopted. These additional plan components focus on protecting the objects of the Monument when managing fire and fuels.

Desired Conditions

- 3.17.93 Fire management tactics and strategies used within the Monument are implemented in a manner that minimizes impacts to sensitive cultural resources.
- 3.17.94 Fuel loading in and around sensitive cultural resources and critical infrastructure within the Monument are at levels that provide relatively low risk to cultural resources, facilities, and visitors from wildfire, and provide for firefighter and public safety.

Objectives

- 3.17.95 Over the life of the plan, reduce hazardous fuels in and around sensitive cultural resources and critical infrastructure within the Monument.
- 3.17.96 Within five years, conduct fuel manipulation and fuel reduction on slopes adjacent to archaeological sites and facilities in order to reduce the potential for fire to negatively impact these areas.
- 3.17.97 Coordinate and partner with Southern Ute Indian Tribe foresters and/or fuels specialists regarding fuels management within the Monument and on adjacent lands.

Standards

- 3.17.98 For all wildland fires within the Monument, a Forest Service archaeologist must be consulted.

Guidelines

- 3.17.99 Wildland fires should be suppressed utilizing Minimum Impact Suppression Tactics (MIST) to help preserve and protect archaeological, historic, cultural, and traditional resources within the Monument.
- 3.17.100 Dozer operations within the Monument should be limited, and should occur only under the immediate direction of a qualified archaeologist.
- 3.17.101 Aerially applied fire retardants and ground-based fire retardant applications should only be used in consultation with a Forest Service archaeologist.

- 3.17.102 When using aerially applied fire retardant and water, tactics to minimize possible erosion should be used.

2.11 Livestock and Rangeland Management

The plan components for livestock and rangeland management apply only to Alternative C since the Monument will be closed to livestock grazing under Alternative B.

Currently, livestock grazing is permitted on approximately 826 acres of the Monument in the Peterson Ridge area as part of the Turkey Cattle and Horse (C&H) Allotment. Topographic features and the steep terrain in this area make access by cattle difficult, and there is limited water available for livestock. Due to the difficult access and lack of water resources, permitted livestock use of the Peterson Ridge area is currently minimal.

All desired conditions, objectives, standards, and guidelines related to livestock and rangeland management in Section 2.7 of the LRMP will continue to apply within the Monument. In addition, plan components designed to specifically address livestock and rangeland management within the Monument will be adopted. These additional plan components focus on protecting the objects of the Monument while implementing livestock grazing.

Desired Conditions

- 3.17.103 Livestock grazing occurs in a manner that does not negatively impact archaeological resources or other objects of the Monument, and does not interfere with the protection of these objects.
- 3.17.104 Range improvements are located and utilized in a manner that does not negatively impact resources or other objects of the Monument, and does not interfere with the protection of these objects.

Objectives

- 3.17.105 Within five years, analyze the Peterson Ridge portion of the Turkey Allotment for potential range improvements that can serve to protect the objects of the Monument by maintaining appropriate distribution of livestock.
- 3.17.106 Annually monitor the impacts of livestock grazing in the Peterson Ridge area to determine the impacts of livestock grazing on the objects of the Monument and implement adaptive management strategies as needed.

Standards

- 3.17.107 Grazing management practices within the Monument must utilize measures to avoid or minimize negative impacts to archaeological sites and other objects of the Monument.
- 3.17.108 Range improvements must be located and constructed in a manner that does not harm the objects of the Monument or interfere with management of the objects.
- 3.17.109 Trailing of livestock through areas containing archaeological resources must be avoided.

Guidelines

(No additional guidelines are provided)

The table below replaces Table 3.17.1 on page 214, Volume II of the LRMP.

Table 1: Chimney Rock National Monument Allowable Uses

Management Activities and Use	Allowable – Prohibited – Restricted
Fire managed for resource benefit	Restricted to preserve and protect the objects of the Monument
Prescribed burning	Restricted to preserve and protect the objects of the Monument
Mechanical fuels treatment	Restricted to preserve and protect the objects of the Monument
Timber production (scheduled on a rotation basis)	Prohibited
Timber harvesting as a tool	Restricted to preserve and protect the objects of the Monument
Commercial use of special forest products and firewood	Restricted to preserve and protect the objects of the Monument
Lands special use authorizations, and utility corridors	Restricted to preserve and protect the objects of the Monument
Recreation Special Uses	Restricted to preserve and protect the objects of the Monument
Livestock grazing	Prohibited in Alt. B Restricted in Alt. C to preserve and protect the objects of the Monument
Facilities	Restricted to preserve and protect the objects of the Monument
Motorized (summer)	Restricted to designated roads
Motorized (winter)	Prohibited
Non-motorized (summer and winter)	Restricted: All non-motorized use restricted to preserve and protect the objects of the Monument. In addition, horses are prohibited on the Great Kiva Trail (#669) & Great House Trail (#632).
Mechanical transport (e.g. bicycles)	Restricted to designated roads
Road construction (permanent or temporary)	Restricted to roads determined to be necessary for administration and protection of the objects of the Monument
Minerals – leasable federal (oil and gas, and other)	Prohibited on all areas of the Monument under federal mineral ownership, with the exception that development of the valid existing lease within the Monument may still occur. When this lease expires, the lands associated with the lease will no longer be available.
Minerals – locatable federal	Prohibited
Minerals – saleable federal (materials)	Prohibited

Chapter 3 – Monitoring Plan

3.1 Introduction

The monitoring plan for the Chimney Rock National Monument will supplement the monitoring plan provided in Chapter 4 of the LRMP. This supplemental monitoring plan provides a framework for the adaptive management process by establishing priorities and timelines for the evaluation of resource conditions and trends that contribute to sustainability and reflect progress towards the land management goals for the Monument. Effective monitoring and evaluation foster improved management and more informed planning decisions. They help identify the need to adjust desired conditions, objectives, standards, and guidelines as conditions change. Monitoring and evaluation help the SJNF and the public determine how this management plan is being implemented, whether implementation is achieving desired outcomes, and whether assumptions made in the planning process are valid.

A detailed discussion of monitoring is provided in Chapter 4 of the LRMP. This includes a discussion of the monitoring process, management indicator species (MIS) monitoring, viability monitoring, and broad-scale monitoring strategies.

3.2 Components of the Monitoring Plan

The monitoring plan presented in this chapter contains seven components that link monitoring efforts directly to the plan components presented in this management plan, and that guide monitoring activity for each element of the plan. These components are focused around selected desired conditions and are designed to test relevant assumptions, track relevant changes, and measure management effectiveness and progress towards achieving or maintaining the management plan's desired conditions.

1. **Desired Condition:** The desired conditions are selected from Chapter 2 and serve as the basis for the monitoring plan. These are the “drivers” of the monitoring plan and provide the “questions” that this monitoring plan seeks to answer.
2. **Objective:** The objectives are projections of measureable and time-specific outcomes or accomplishments that, if achieved, would contribute to maintaining or reaching desired conditions during the life of the management plan. They relate directly to the desired conditions and are also selected from Chapter 2.
3. **Priority:** High priority (H) items have been identified by resource specialists as essential for protecting the objects of the Monument. Monitoring elements required by law and/or by regulation are also ranked as high priority. It is expected that annual budgets would normally allow most of these high priority items to be funded. Medium priority (M) indicates that the monitoring element is directed by the management plan (which may or may not be directly associated with required laws or regulations) as developed in Chapter 2, but would be contingent upon available funding after high priority monitoring items have been funded. Low priority (L) indicates that the monitoring element involves questions of a more indirect nature or that it does not fall under one of the above classifications. Typically these monitoring elements occur rarely unless funding and personnel are available. In general, high priority items will have higher

precision and reliability, and medium and low priority items will have low precision and reliability.

4. **Performance Measures and Indicators:** This column identifies USFS performance measures or other indicators that will be used to gauge or track accomplishments that lead the SJNF toward meeting objectives and desired conditions. These indicators provide a measureable quantitative or qualitative parameter.
5. **Scale:** Scale describes the level of analysis with respect to land size or level of application. This measure is important in describing impacts dealing with habitat heterogeneity and population viability issues, as well as describing cumulative impacts related to, or resulting from, management actions.
6. **Frequency of Reporting:** Frequency of reporting describes the timing of monitoring and evaluation efforts. Much data are collected annually, while other data are collected at longer or shorter intervals based on the length of time needed to discern a measureable change.
7. **Sources and Partners:** Potential data sources for information and partners that may be involved in providing input into the monitoring process or identifying areas where research may be needed.

Table 2: Monitoring Plan

Desired Condition	Plan or Monitoring Objective	Monitoring Priority	Performance Measures and/or Indicators	Scale	Frequency of Reporting	Sources and/or Partners
CULTURAL RESOURCES						
3.17.1 Cultural and ethnographic resources within the monument are preserved and protected in a manner that ensures long-term stewardship of these resources and sustainable public benefits.	3.17.6 Over the life of the plan, conduct inventories for and oversee research about archaeological, historical, and ethnographic resources to better understand and manage the resources.	M	Heritage Program Managed to Standard & Secretary's Report to Congress	Monument-Wide	Annually to every 5 to 10 years	Forest Service, Colleges, Universities, Pueblos and Tribes, State Historical Fund National Trust, Grants
3.17.2 Cultural resources in the monument are managed on a landscape level and the cultural values provided by the viewsheds, night sky, and auditory environment are maintained.	3.17.8 Within 10 years, prioritize sites at the Monument for public interpretation, research, stabilization, conservation, and/or traditional uses.		Tracked in Natural Resource Manager (NRM) Heritage modules			
3.17.5 Visitors respect and leave archaeological resources and tribal offerings undisturbed.	3.17.9 Within five years, implement a monitoring plan for cultural resources that evaluates factors such as cultural resource use-allocation, National Register of Historic Places (NRHP) status, public use patterns, vandalism occurrences, vulnerability and cultural sensitivity.					
TRIBAL INTERESTS						
3.17.24 Tribal traditions are valued by the Forest Service and the public. When appropriate, these traditions are incorporated into the interpretation of the monument to help provide visitor experiences that foster cultural understanding. Tribes are encouraged to participate in the development of interpretive materials and to assist in the training of tour guides/interpreters.	3.17.26 Within five years, produce a tribal oral history of the Chimney Rock area.	H		Monument-wide	Annual consultation meetings, other activities within 5 years	Forest Service, Tribes and Pueblos, Grants
	3.17.27 Within five years, develop a policy in consultation with the tribes that specifies how traditional food and medicine gathering will occur within the monument.					
3.17.25 Tribal consultation regarding management, interpretation, traditional uses and other issues of tribal concern within the monument is an on-going process and is fostered to maintain open communications with tribes.	3.17.28 Conduct annual tribal consultation meetings regarding the Monument and provide additional opportunities to consult throughout the year					

Desired Condition	Plan or Monitoring Objective	Monitoring Priority	Performance Measures and/or Indicators	Scale	Frequency of Reporting	Sources and/or Partners
RECREATION						
3.17.32 Management of the Monument supports recreation and tourism activities without degradation to the objects of the Monument, thereby contributing to the local and regional economy.	Plan Objectives 3.17.67, 3.17.76, and 3.17.77 (<i>these objectives are listed below in the Terrestrial & Riparian Ecosystems section, and Terrestrial Wildlife and Fisheries section</i>)	3.17.67-L 3.17.76-M 3.17.77-H	Impacts to resources	Monument-wide	Annually (3.17.76 & 77) or Within 5 years (3.17.67)	Forest Service, Chimney Rock Interpretive Association, Grants
3.17.33 Access to the Monument for recreational activities is managed and enabled in a manner that protects and provides for the enjoyment of the objects for which the Monument was created.	3.17.37 Within ten years, provide alternative opportunities to experience the objects of the Monument through the construction of additional non-motorized trails. Monitoring Objective: Developed recreation facilities are monitored to ensure compliance with critical National Quality Standards.	H	Level of visitor satisfaction (as shown in Customer Report Card analysis)	Monument-wide	Within 10 years	Forest Service, Chimney Rock Interpretive Association, Grants
3.17.36 Management of visitor capacity and implementation of public safety measures considers visitor experiences and resource protection needs within the Monument.	3.17.38 Within five years, design and implement public safety measures in the Monument, including along the trail to the Great House. 3.17.10 Within five years, design and implement archaeological site hardening along the trail to the Great House and other areas as needed. 3.17.40 Within three years, develop an interpretive plan and improve signage for the Monument.	M	Level of visitor satisfaction with safety & security of site, signage, and health & cleanliness of site	In developed areas of the Monument	Within 3-5 years	Forest Service, Chimney Rock Interpretive Association, Grants

Desired Condition	Plan or Monitoring Objective	Monitoring Priority	Performance Measures and/or Indicators	Scale	Frequency of Reporting	Sources and/or Partners
SCENERY and the AUDITORY ENVIRONMENT 3.17.46 All activities occurring in the Monument are managed in a manner that protects, enhances, or conserves the Monument's scenic and auditory resources.	3.17.48 Over the life of the plan, document existing air quality conditions, including visibility. This could include photo documentation from key viewpoints or air quality data obtained from existing monitoring facilities in the region.	L	Changes in air quality	Region-wide	Every 10 years	On-site field monitoring, aerial photos. Could partner with BLM and others that conduct air quality monitoring
TERRESTRIAL and RIPARIAN ECOSYSTEMS 3.17.63 Vegetative communities within the Monument from which traditional cultural materials are gathered are resilient and self-perpetuating. 3.17.64 Ground cover within the Monument is maintained at levels necessary to prevent accelerated rates of erosion, and provide protection to archaeological sites and soils.	3.17.66 Within ten years, prioritize where restoration, fuels treatment, or habitat improvement projects may be needed within the Monument, and where important traditional cultural materials collected by tribes are located. 3.17.67 Within five years, conduct an assessment of riparian health and stream channel stability along the portions of Stollsteimer Creek and the Piedra River within the Monument.	L	Presence and extent of unique vegetative features Riparian health and stream channel stability	Monument-wide Where Stollsteimer Creek and the Piedra River occur within Monument	Within 10 years Within 5 years	On-site field monitoring On-site field monitoring

TERRESTRIAL WILDLIFE and FISHERIES						
3.17.72 Wildlife habitat across the monument continues to support the terrestrial wildlife species considered objects of the Monument.	3.17.76 Over the life of the plan, conduct monitoring of deer and elk use in winter concentration areas within the Monument to ensure that habitat capability and effectiveness are maintained during key use periods.	M	Continued use of the Monument by big game in association with increased dispersed non-motorized winter recreation. Monitoring methods will include but are not limited to: coordinated grounds counts during key use periods (Dec. 1 – April 30), obtaining population data from CPW or SUIT upon completion of annual winter big game counts overlapping the CRNM, & other appropriate methods developed in coordination with CPW and SUIT.	Monument-wide	Annually	Forest Service, Colorado Parks and Wildlife, Southern Ute Indian Tribe
3.17.74 Migrating mule deer and elk continue utilizing winter concentration areas and severe winter range habitat across the monument.						
3.17.73 Peregrine falcons continue to occupy breeding habitat on Companion Rock or Chimney Rock.	3.17.77 Over the life of the plan, conduct monitoring of peregrine falcon nesting on Companion Rock to ensure that habitat capability and effectiveness are maintained during key use periods.	H	Continued use of Companion Rock or Chimney Rock by peregrine falcons.	Around Companion Rock and Chimney Rock	Monitored annually & evaluated at 5 year intervals to determine impacts to breeding activity	Forest Service, Colorado Parks & Wildlife

<p>LIVESTOCK and RANGELAND MANAGEMENT</p> <p>3.17.103 Livestock grazing occurs in a manner that does not negatively impact archaeological resources or other objects of the Monument, and does not interfere with the protection of these objects.</p> <p>3.17.104 Range improvements are located and utilized in a manner that does not negatively impact resources or other objects of the Monuments, and does not interfere with the protection of these objects.</p>	<p>3.17.106 Annually monitor the impacts of livestock grazing in the Peterson Ridge area to determine the impacts of livestock grazing on the objects of the Monument and implement adaptive management strategies as needed.</p>	<p>H</p>	<p>Impacts to the objects of the Monument, including cultural resources, terrestrial and riparian ecosystems, terrestrial wildlife, and recreation use.</p>	<p>In the Peterson Ridge portion of the Monument</p>	<p>Annually</p>	<p>On-site field monitoring conducted by the Forest Service and range permittees</p>
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Chapter 4 – References

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USDA Forest Service/USDI Bureau of Land Management. 2013. BLM Tres Rios Field Office/San Juan National Forest Land and Resource Management Plan, Volume I: Final Environmental Impact Statement.

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4.2 Glossary

adaptive management: The process of implementing management decisions incrementally, so that changes can be made if the desired results are not being achieved. Adaptive management acknowledges that our understanding of complex ecological systems is limited and we may make mistakes, but the seriousness of these mistakes can be reduced by placing forest management into a consciously experimental framework, carefully observing the ecosystem’s response to our well-intentioned efforts, and modifying our actions appropriately as we learn more about the ecosystem.

aesthetic resources: Resources that are responsive to or lead to an appreciation of what is pleasurable to the senses.

air quality: Refers to standards for various classes of land as designated by the Clean Air Act (Public Law 88-206: January 1978).

archaeoastronomy: The study of the knowledge, interpretations, and practices of ancient cultures regarding celestial objects or phenomena.

archaeological site hardening: Site hardening involves activities done to reduce the impacts of visitors on sensitive resources while still allowing access and visitation to these sites. Specifically, archaeological site hardening may involve actions such as placement of geotextile materials and covering archaeological sites under sterile soil or physical barriers to protect sites from visitor impacts.

big game: Those species of large mammals normally managed as a sport hunting resource. Generally includes elk, moose, white-tailed deer, mule deer, mountain goat, bighorn sheep, black bear, and mountain lion.

Brunot Agreement: The Brunot Agreement, ratified by Congress in 1874, withdrew over 5,000 square miles in the mountains of southwest Colorado from the 1868 Ute Reservation. The agreement, entered into between the United States and the Ute Indians in Colorado, was passed into law (18 Stat., 36) by the House of Representatives and the Senate of the U.S. Congress on April 29, 1874. Under the “reserved

rights doctrine,” hunting rights on reservation lands relinquished by the Utes were retained; that is, the tribes retained such rights as part of their status as prior and continuing sovereigns.

Built Environment and Built Environment Image Guide: The built environment includes administrative and recreation structures, landscape structures, site furnishings, structures on roads and trails, and signs installed or operated by the Forest Service, its cooperators, and its permittees. The Built Environment Image Guide (FS-710) aims to ensure thoughtful design and management of the built environment.

cultural resource: Any prehistoric or historic site that is more than 50 years old. The physical remains of human activity (artifacts, ruins, burial mounds, petroglyphs, etc.) having scientific, prehistoric, or social values.

designated roads and trails: Specific roads and trails identified by the land management agency where motorized vehicle use is authorized. Road and trail designations include the types of vehicles authorized to operate on a specific route and may also include a time of year (season) when motorized use is allowed.

desired condition: Desired conditions are statements of the social, economic, and ecological attributes and values toward which management strives to achieve and characterize or exemplify the desired outcomes of land management. They describe how the area is expected to look and function in the future.

developed recreation: Outdoor recreation requiring significant capital investment in facilities to handle a concentration of visitors on a relatively small area. Examples are ski areas, resorts, and campgrounds.

easement: A right afforded a person or agency to make limited use of another’s real property for access or other purposes.

environmental impact statement (EIS): A detailed written statement as required by Section 12(2)(C) of the National Environmental Policy Act (40 CFR 1508.11). An analytical document prepared under the National Environmental Policy Act that portrays potential impacts to the human environment of a Proposed Action and its possible alternatives. An EIS is developed for use by decision makers to weigh the environmental consequences of a potential decision.

erosion: Detachment or movement of soil or rock fragments by water, wind, ice, or gravity. Accelerated erosion is much more rapid than normal, natural, or geologic erosion, primarily as a result of the influence of activities of people, animals, or natural catastrophes.

ethnographic resources: Ethnographic resources are objects and places, including sites, structures, landscapes, and natural resources, with traditional cultural meaning and value to associated peoples. Research and consultation with associated people identifies and explains the places and things they find culturally meaningful. Ethnographic resources may be eligible for the National Register of Historic Places as traditional cultural properties.

facility: A single or contiguous group of improvements that exists to shelter or to support Forest Service programs. The term may be used in either a broad or narrow context; for example, a facility may be a ranger station compound, lookout tower, leased office, work center, separate housing areas, visitor center, research laboratory, recreation complex, utility system, or telecommunications site.

grazing allotment: A designated area of land available for livestock grazing upon which a specified number and kind of livestock are permitted to graze for a certain period. Allotments generally consist of federal and state lands and/or private lands. An allotment may include one or more separate pastures.

Livestock numbers and periods of use are specified via grazing permits for each allotment. Allotments are administered to standard when the responsible manager determines and documents that the permittee is in compliance and that applicable resource management standards are being met. Where the permittee is not in compliance, necessary corrective actions are initiated and documented.

guideline: A guideline is presumptively a requirement to meet desired conditions and objectives, and/or to ensure the long-term viability of resources.

habitat: An environment that meets a specific set of physical, biological, temporal or spatial characteristics that satisfy the requirements of a plant or animal species or group of species for part or all of their life cycle. The sum total of environmental conditions of a specific place occupied by a wildlife species or a population of such species.

landscape: The aspect of the land that is characteristic of a particular region or area. Landscape character is the combination of physical, biological, and cultural attributes that gives an area its visual and cultural identity. Each attribute contributes to the uniqueness of the landscape and gives a particular place meaning and value and helps to define a “sense of place.” Landscape character provides a frame of reference from which to determine scenic attractiveness and to measure scenic integrity and scenic sustainability. Landscape visibility addresses the relative importance and sensitivity of what is seen and perceived in the landscape. It is a function of many important and interconnected considerations such as number and context of viewers, duration of views, degree of discernible detail (which depends in part on the position of the viewer, i.e. the landscape may be superior, level with, or inferior) and seasonal variation. Landscape visibility inventory and analysis consists of three elements, including travel ways and use areas, concern levels, and distance zones.

landscape character: The combination of physical, biological and cultural attributes that gives an area its visual and cultural identity. Each attribute contributes to the uniqueness of the landscape and gives a particular place meaning and value and helps to define a “sense of place.” Landscape character provides a frame of reference from which to determine scenic attractiveness and to measure scenic integrity and scenic sustainability.

livestock: Species of domestic animals including cattle, sheep, horses, burros, and goats.

locatable minerals: Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

management indicator species (MIS): A species of wildlife, fish, or plant whose health and vigor are believed to accurately reflect the health and vigor of other species having similar habitat and protection needs to those of the selected indicator species.

mastication: The altering of live or dead vegetation into small chunks by grinding, shredding, or chopping using a front-end or boom-mounted rotary blade or drum-type head. It is often used on shrubby vegetation, like Gambel oak, but can also be used in and around woodland vegetation (like pinyon-juniper) or other relatively small trees (i.e., up to 10 inches in diameter). Mastication is generally used to break up fuel connectivity between ground fuels and canopy fuels.

mechanical fuels treatment: Any method to masticate or thin vegetation by hand or by machine (including thinning with chainsaws or any commercial machine, shredder, chipper, or similar equipment.)

mineral: Any naturally formed inorganic material/solid or fluid inorganic substance that can be extracted from the earth, or any of various naturally occurring homogeneous substances (as stone, coal, salt, sulfur, sand, petroleum, water, or natural gas) obtained for human use, usually from the ground. Under federal laws, considered as locatable (subject to the general mining laws), leasable (subject to the Mineral Leasing Act of 1920), and salable (subject to the Materials Act of 1947).

mineral entry: The filing of a claim on public land to obtain the right to any locatable minerals it may contain.

mineral estate: The ownership of minerals, including rights necessary for access, exploration, development, mining, ore dressing, and transportation operations.

mineral materials: Materials such as sand and gravel and common varieties of stone, pumice, pumicite, and clay that are not obtainable under the mining or leasing laws, but that can be acquired under the Materials Act of 1947, as amended.

minimum impact suppression tactics: The application of strategy and tactics that effectively meet suppression and resource objectives with the least environmental, cultural and social impacts.

National Forest System (NFS): All national forest lands reserved or withdrawn from the public domain of the United States; all national forest lands acquired through purchase, exchange, donation, or other means, the national grasslands and land utilization projects administered under Title 111.

National Forest System Road (NFSR): A forest road other than a road that has been authorized by a legally documented right-of-way held by a state, county, or other local public road authority.

National Forest System Trail (NFST): A forest trail other than a trail that has been authorized by a legally documented right-of-way held by a state, county, or other local public road authority.

objectives: Objectives are concise projections of measurable, time-specific intended outcomes. Objectives are a means of progressing toward maintaining and/or achieving desired conditions. As with desired conditions, they are aspirations, not commitments or final project decisions.

objects of the Monument: The objects of the Monument include the scientific and historic objects described in the 2012 Presidential Proclamation that are the resources and values that make the Monument significant. The proclamation requires that the management plan for Chimney Rock provide for the protection and interpretation of the scientific and historic objects identified in the proclamation, and provide for continued public access to those objects, consistent with their protection. These objects are the focus of the management plan and include cultural resources, cultural values, visual and landscape characteristics, biological features, and economic opportunities.

permitted livestock: Livestock presently being grazed under a permit or those that were grazed under a permit during the preceding season, including their offspring retained for herd replacement.

prescribed burning: The intentional application of fire to wildland fuels in either their natural or modified state under such conditions as to allow the fire to be confined to a predetermined area and at the same time to produce the intensity of heat and rate of spread required to further certain planned objectives (i.e., silviculture, wildlife management, reduction of fuel hazard, etc.).

range improvement: An authorized physical modification or treatment that is designed to improve production of forage, change vegetation composition, control patterns of use, provide water, stabilize soil

and water conditions, and restore, protect, and improve the condition of rangeland ecosystems to benefit livestock, wild horses and burros, and fish and wildlife. The term includes, but is not limited to, structures, treatment projects, and use of mechanical devices or modifications achieved through mechanical means (43 CFR 4100).

recreation opportunities: Favorable circumstances enabling visitors' engagement in a leisure activity to realize immediate psychological experiences and attain more lasting, value-added beneficial outcomes.

Recreation Opportunity Spectrum (ROS): The ROS offers a framework to establish the desired setting conditions of access, remoteness, naturalness, built environment, social encounters, visitor impacts, and management for all areas of the San Juan National Forest. A description of the various ROS setting is shown below.

- **Pristine** areas provide outstanding opportunity for solitude, natural quiet, and isolation; sights and sounds of development do not intrude on the experience. Lands are managed to protect and perpetuate their pristine conditions. Encounters with others are rare. All travel is cross-country. There is no lasting evidence of camping activity, social trails, or other human impacts. Indirect methods of accomplishing management objectives predominate.
- **Primitive** areas are an essentially unmodified natural environment. These areas offer a moderate degree of solitude and natural quiet, and are managed to allow natural ecological change to occur uninterrupted. Human influence on vegetation is minimal. There may be evidence of campsites. Campsites are dispersed; usually one will not hear or see visitors at adjacent campsites. Maintained trails exist and user-established trails are evident. Evidence of management is minor.
- **Semi-primitive** areas are managed to protect the natural environment and provide access to primitive or pristine areas. Encounters with other users may be frequent in some concentrated use areas. Constructed and maintained trails support access to popular destinations. Use is often heavily concentrated day use; however, overnight camping occurs. Management emphasizes sustaining and protecting natural conditions. Management actions to mitigate visitor use impacts may be noticeable. Human use and activities within the area may be evident.
- **Semi-primitive non-motorized non-wilderness** backcountry areas are characterized by a quiet, predominantly natural-appearing environment. Resource modification and utilization practices are not evident. Recreation opportunities are primarily those that provide opportunities for self-reliance and challenge. Concentrations of users are low. Common recreation activities include hiking, mountain biking, hunting, fishing, backpacking, and camping.
- **Semi-primitive motorized** landscapes are similar in naturalness to semi-primitive non-motorized landscapes with motorized travel. Travel is over designated trails or high-clearance, four-wheel drive roads. Roads are designed primarily for low speeds and with native surfacing. Road and trail density provide for a sense of remoteness and solitude. Common recreation activities include motorized trail riding, four-wheel driving, visiting cultural sites, hunting, fishing, and dispersed camping.
- **Roaded natural** lands are generally high use travel corridors with a high level of visitor services and associated development. Concentrations of users can be moderate to high. The areas often take on a mosaic of development and resource evidence from highly modified areas to pockets of unmodified lands. Conventional motorized use is provided for in construction standards such as road widths and surface hardening. Road development levels are native surfaced high-clearance to levels that will accommodate passenger vehicles. Off-highway vehicle travel is common on forest roads and trails. Road and trail densities are moderate to high and interaction with the other users is to be expected. Developed campgrounds, picnic areas, trailhead, and interpretive sites may be present within this setting. Constructed recreation facilities provide for resource protection, visitor information and comfort. Hunting, fishing, biking, hiking, and viewing scenery

are common activities.

- **Rural** areas are substantially modified, although they may have natural-appearing elements. Facilities are almost always designed for a large number of people and roads are generally paved. Rural areas are characterized by substantially modified natural environment. The landscape is often dominated by human-caused geometric patterns; there is also a dominant sense of open, green-space. Development of facilities is for user comfort such as pavement on roads and trails, and convenience amenities within campgrounds. Common facilities within this setting would be visitor centers, developed campgrounds that provide electricity and showers, areas with multiple facility developments such as lodges, campgrounds, and recreation residences. Driving for pleasure, viewing scenery and cultural features, camping, and picnicking are common activities.

right-of-way (ROW): The public lands authorized to be used or occupied for specific purposes pursuant to a ROW grant, which are in the public interest and which require ROWs over, upon, under, or through such lands.

riparian: A type of ecological community that occurs adjacent to streams and rivers. It is characterized by certain types of vegetation, soils, hydrology, and fauna and requires free or unbound water or conditions more moist than that normally found in the area.

riparian area: A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and depend on free water in the soil.

road: A motor vehicle route over 50 inches wide, unless identified and managed as a trail that has been improved and maintained by mechanical means to ensure relatively regular and continuous use. (A way maintained strictly by the passage of vehicles does not constitute a road.)

scenic integrity: A measure of the lack of noticeable human-caused disturbance in the area that detracts from the dominant, valued attributes of landscape character. The baseline from which to measure scenic integrity is dependent upon a complete and accurate description of the important and dominant positive landscape character attributes that are viewed at the time of measurement.

scenic integrity objectives:

- **Very High** – refers to landscapes where the valued landscape character “is” intact with only minute if any deviations. The existing landscape character and sense of place is expressed at the highest possible level.
- **High** – refers to landscapes where the valued landscape character “appears” intact. Deviations may be present but must repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that they are not evident.
- **Moderate** – refers to landscapes where the valued landscape character “appears slightly altered.” Noticeable deviations must remain visually subordinate to the landscape character being viewed.
- **Low** – refers to landscape where the valued landscape character “appears moderately altered.” Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes, or architectural styles outside the landscape being viewed. They should not only appear as valued character outside the landscape being viewed but compatible or complimentary to the

character within.

- **Very Low** – refers to landscapes where the valued landscape character “appears heavily altered.” Deviations may strongly dominate the valued landscape character. They may not borrow from valued attributes such as size, shape, edge effect and pattern of natural openings, vegetative type changes, or architectural styles within or outside the landscape being viewed. However deviations must be shaped and blended with the natural terrain (landforms) so that elements such as unnatural edges, roads, landings, and structures do not dominate the compositions.

sensitive species: A plant or animal listed by a state or federal agency as being of environmental concern that includes, but is not limited to, threatened and endangered species.

severe winter range: Areas within the winter range where 90% of the individuals are located when annual snowpack is at its maximum and/or temperatures are at a minimum in the two worst winters out of ten.

Special Use Permit: A permit issued under established laws and regulations to an individual, organization, or company for occupancy or use of National Forest System lands for some special purpose.

species: Any member of the currently accepted and scientifically defined plant or animal kingdoms of organisms (U.S. Forest Service 2005). A unit of classification of plants and animals consisting of the largest and most inclusive array of sexually reproducing and cross-fertilizing individuals which share a common gene pool.

standard: A particular action, level of performance, or threshold specified by the Forest Plan for resource protection or accomplishment of management objectives. Unlike “guidelines” which are optional, standards specified in the Forest Plan are mandatory.

suitability: The appropriateness of a particular area of land for applying certain resource management practices, as determined by an analysis of the existing resource condition of that land. A unit of land may be suitable for a variety of management practices.

traditional cultural property: A property that derives significance from traditional values associated with it by a social and/or cultural group such as an Indian tribe or local community. A traditional cultural property may qualify for the National Register of Historic Places if it meets the criteria and criteria exceptions at 36 CFR 60.4. See National Register Bulletin 38.

trail: A route 50 inches or less in width or a route over 50 inches wide that is identified and managed as a trail.

trailing: Trailing is the deliberate ambulatory movement of domestic livestock animals controlled by one or more herders, from one location to another.

tribe: Term used to designate a federally recognized group of American Indians and their governing body. Tribes may be composed of more than one band.

undertaking: A term with legal definition and application i.e., “actions carried out by or on behalf of the agency; those carried out with federal financial assistance; those requiring a federal permit, license, or approval; and those subject to State or local regulation administered pursuant to a delegation or approval by a federal agency.” (See National Historic Preservation Act, Section 106 and Section 301(7), Appendix 5; 36 CFR Part 800).

valid existing rights: Any lease established (and valid) prior to a new authorization, change in land

designation, or in regulation.

visibility (air quality): A measurement of the ability to see and identify objects at different distances.

wildfire: Unplanned human or naturally caused fires in wildlands.

wildland fire: Any fire, regardless of ignition source, that is burning outside a prescribed fire and any fire burning on public lands or threatening public land resources, where no fire prescription standards have been prepared.

winter concentration area: That part of the winter range of a species where densities are at least 200% greater than the surrounding winter range density during the same period used to define winter range in the average 5 winters out of 10.

winter range: A range, usually at lower elevation, used by migratory deer and elk during the winter months; usually better defined and smaller than summer ranges.

4.3 Keyword Index

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Appendix A

Proclamation

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release

September 21, 2012

ESTABLISHMENT OF THE CHIMNEY ROCK NATIONAL MONUMENT

- - - - -

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

The Chimney Rock site in southwestern Colorado incorporates spiritual, historic, and scientific resources of great value and significance. A thousand years ago, the vast Chaco civilization was drawn to the site's soaring massive rock pinnacles, Chimney Rock and Companion Rock, that rise hundreds of feet from the valley floor to an elevation of 7,600 feet. High atop ancient sandstone formations, Ancestral Pueblo People built exquisite stone buildings, including the highest ceremonial "great house" in the Southwest.

This landscape, encompassing both Chimney Rock and Companion Rock, and known today as Chimney Rock, holds deep spiritual significance for modern Pueblo and tribal communities and was one of the largest communities of the Pueblo II era (900-1150 A.D.). The Chimney Rock site also includes nationally significant archaeology, archaeoastronomy, visual and landscape characteristics, and geological and biological features, as well as objects of deep cultural and educational value.

In 1100 A.D., the area's cultivated fields and settlements extended from the valley floors to the mesa tops. The pinnacles, Chimney Rock and Companion Rock, dominated the landscape. Today, peregrine falcons nest on the pinnacles and soar over ancient structures, the dramatic landscape, and the forested slopes of the Piedra River and Stolsteimer Creek drainages, which are all framed by the high peaks of the San Juan Mountains.

Migratory mule deer and elk herds pass through the area each fall and spring as they have for thousands of years, and live there during the critical winter months. Merriam's turkeys, river otters, bald eagles, golden eagles, mountain lions, bats, woodpeckers, and many species of migratory birds also live in the area among the Ponderosa Pine, pinon, and juniper. Several desert plants usually found farther south grow there, including a species of cholla cactus that does not occur naturally outside the Sonoran Desert and is believed to be associated with deliberate cultivation by the Ancestral Pueblo People.

The Chimney Rock site is one of the best recognized archaeoastronomical resources in North America. Virtually all building clusters have views of Chimney Rock and Companion Rock, which frame multiple astronomical alignments and illustrate the Ancestral Pueblo People's knowledge of astronomy. Hundreds of archaeological ruins and buildings from the Pueblo II period are within the boundaries of the site, including a Chaco-style

communal multi-room "great house" built in the late eleventh century to command observations of the surrounding landscape and astronomical phenomena.

The Chimney Rock site features an isolated Chacoan settlement among a complex system of dispersed communities bound by economic, political, and religious interdependence centered in Chaco Canyon, New Mexico, about 100 miles south of Chimney Rock. Chimney Rock continues to contribute to our knowledge about the Ancestral Pueblo People and their understanding and command of their environment.

Today, descendants of the Ancestral Pueblo People return to this important place of cultural continuity to visit their ancestors and for other spiritual and traditional purposes. It is a living landscape that shapes those who visit it and brings people together across time. Since the 1920s, there has been significant archaeological interest in Chimney Rock. Because it does not appear to have been reoccupied after the early 1100s, Chimney Rock offers a valuable window into the cultural developments of the Pueblo II era and affords opportunities to understand how geology, ecology, and archaeology interrelate. Because visitors travel from areas near and far, these lands support a growing travel and tourism sector that is a source of economic opportunity for the community, especially businesses in the region. They also help to attract new residents, retirees, and businesses that will further diversify the local economy.

In 1970, Chimney Rock was listed on the National Register of Historic Places, and its spectacular landscape has been open to visitors ever since.

WHEREAS section 2 of the Act of June 8, 1906 (34 Stat. 225, 16 U.S.C. 431) (the "Antiquities Act"), authorizes the President, in his discretion, to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and to reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with the proper care and management of the objects to be protected;

WHEREAS it is in the public interest to preserve and protect the objects of scientific and historic interest at Chimney Rock;

NOW, THEREFORE, I, BARACK OBAMA, President of the United States of America, by the authority vested in me by section 2 of the Antiquities Act, hereby proclaim, set apart, and reserve as the Chimney Rock National Monument (monument) the objects identified above and all lands and interests in lands owned or controlled by the Government of the United States within the boundaries described on the accompanying map entitled "Chimney Rock National Monument" and the accompanying legal description, which are attached to and form a part of this proclamation, for the purpose of protecting those objects. These reserved Federal lands and interests in lands encompass approximately 4,726 acres, which is the smallest area compatible with the proper care and management of the objects to be protected.

All Federal lands and interests in lands within the boundaries of the monument are hereby appropriated and withdrawn from all forms of entry, location, selection, sale, leasing, or other disposition under the public lands laws, including withdrawal from location, entry, and patent under the mining laws, and from disposition under all laws relating to mineral and geothermal leasing. Lands and interests in lands within the monument's boundaries not owned or controlled by the United States shall be reserved as part of the monument upon acquisition of ownership or control by the United States.

The establishment of this monument is subject to valid existing rights. The Secretaries of Agriculture and the Interior shall manage development under existing oil and gas leases within the monument, subject to valid existing rights, so as not to create any new impacts that would interfere with the proper care and management of the objects protected by this proclamation.

Nothing in this proclamation shall be construed to alter the valid existing water rights of any party, including the United States.

The Secretary of Agriculture (Secretary) shall manage the monument through the Forest Service, pursuant to applicable legal authorities, consistent with the purposes and provisions of this proclamation. The Secretary shall prepare, within 3 years of the date of this proclamation, a management plan for the monument, and shall promulgate such regulations for its management as deemed appropriate. The plan will provide for protection and interpretation of the scientific and historic objects identified above, and continued public access to those objects, consistent with their protection. The plan will protect and preserve access by tribal members for traditional cultural, spiritual, and food- and medicine-gathering purposes, consistent with the purposes of the monument, to the maximum extent permitted by law.

The Secretary shall prepare a transportation plan that addresses actions necessary to protect the objects identified in this proclamation, including road closures and travel restrictions. For the purpose of protecting the objects identified above, the Secretary shall limit all motorized and mechanized vehicle use to designated roads, except for emergency or authorized administrative purposes.

The Secretary shall, in developing any management plans and any management rules and regulations governing the monument, consult with the Secretary of the Interior. The final decision to issue any management plans and any management rules and regulations rests with the Secretary of Agriculture. Management plans or rules and regulations developed by the Secretary of the Interior governing uses within national parks or other national monuments administered by the Secretary of the Interior shall not apply within the monument.

Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Colorado with respect to fish and wildlife management.

Nothing in this proclamation shall be deemed to enlarge or diminish the rights of any Indian tribe.

Laws, regulations, and policies followed by the Forest Service in issuing and administering grazing permits or leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the monument.

The Secretary may carry out vegetative management treatments within the monument, except that timber harvest and prescribed fire may only be used when the Secretary determines it appropriate to address the risk of wildfire, insect infestation, or disease that would endanger the monument or imperil public safety.

Nothing in this proclamation shall be deemed to revoke any existing withdrawal, reservation, or appropriation; however, the national monument shall be the dominant reservation.

Warning is hereby given to all unauthorized persons not to appropriate, injure, destroy, or remove any feature of the monument and not to locate or settle upon any of the lands thereof.

IN WITNESS WHEREOF, I have hereunto set my hand this twenty-first day of September, in the year of our Lord two thousand twelve, and of the Independence of the United States of America the two hundred and thirty-seventh.

BARACK OBAMA

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